

Appl. No. 10/748,495  
Amdt. Dated April 17, 2006  
Reply to Office Action of Dec. 16, 2005

### **Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application.

### **Listing of Claims:**

Claims 1-16. canceled.

Claim 17. (currently amended): A method for treating a patient in need of treatment for a cardiac disorder, comprising administering to said patient an effective amount of a seven-carbon fatty acid chain composition to provide relief to said patient from said cardiac disorder selected from cardiac muscle weakness or cardiac myopathy.

Claim 18. (previously presented): The method of Claim 17, wherein said seven-carbon fatty acid composition comprises n-heptanoic acid.

Claim 19. (previously presented): The method of Claim 17, wherein said seven-carbon fatty acid composition comprises a triglyceride comprising n-heptanoic acid.

Claim 20. (previously presented): The method of Claim 19, wherein said triglyceride comprises triheptanoin.

Claim 21. (previously presented): The method of Claim 17, wherein said seven-carbon fatty acid composition is selected from a substituted, unsaturated, or branched seven-carbon fatty acid composition.

Claim 22. (previously presented): The method of Claim 17, wherein said seven-carbon fatty acid chain composition is selected from the group consisting of 4-methylhexanoate, 4-methylhexenoate, 3-hydroxy-4-methylhexanoate; 5-methylhexanoate, 5-methylhexenoate and 3-hydroxy-5-methylhexanoate.

Claim 23. (previously presented): The method of any of Claims 17 to 22, wherein said cardiac disorder is cardiac muscle weakness.

Claim 24. (previously presented): The method of any of Claims 17 to 22, wherein said

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cardiac disorder is cardiac myopathy.

Claim 25. (previously presented): The method of any of Claims 17 to 22, wherein said cardiac disorder is the need by heart tissue for fuel resulting from reduced efficiency of the even carbon fatty acid metabolic pathway.

Claim 26. (previously presented): The method of any of Claims 17 to 22, wherein said composition is adapted for consumption in one or more doses, and said doses comprise about 15 to about 40% of the dietary caloric requirement for said patient for 24 hours.

Claim 27. (previously presented): The method of Claim 23, wherein said composition is adapted for consumption in one or more doses, and said doses comprise about 15 to about 40% of the dietary caloric requirement for said patient for 24 hours.

Claim 28. (previously presented): The method of Claim 24, wherein said composition is adapted for consumption in one or more doses, and said doses comprise about 15 to about 40% of the dietary caloric requirement for said patient for 24 hours.

Claim 29. (previously presented): The method of Claim 25, wherein said composition is adapted for consumption in one or more doses, and said doses comprise about 15 to about 40% of the dietary caloric requirement for said patient for 24 hours.

Claim 30. (previously presented): The method of any of Claims 17 to 22, wherein said composition is adapted for consumption in one or more doses, and said doses comprise about 20 to about 35% of the dietary caloric requirement for said patient for 24 hours.

Claim 31. (previously presented): The method of Claim 23, wherein said composition is adapted for consumption in one or more doses, and said doses comprise about 20 to about 35% of the dietary caloric requirement for said patient for 24 hours.

Claim 32. (previously presented): The method of Claim 24, wherein said composition is adapted for consumption in one or more doses, and said doses comprise about 20 to about 35% of the dietary caloric requirement for said patient for 24 hours.

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Claim 33. (previously presented): The method of Claim 25, wherein said composition is adapted for consumption in one or more doses, and said doses comprise about 20 to about 35% of the dietary caloric requirement for said patient for 24 hours.

Claim 34. (previously presented): The method of any of Claims 17 to 22, wherein said composition is administered via enteral administration.

Claim 35. (previously presented): The method of Claim 23, wherein said composition is administered via enteral administration.

Claim 36. (previously presented): The method of Claim 24, wherein said composition is administered via enteral administration.

Claim 37. (previously presented): The method of Claim 25, wherein said composition is administered via enteral administration.

Claim 38. (previously presented): The method of any of Claims 17 to 22, wherein said composition is administered via parenteral administration.

Claim 39. (previously presented): The method of Claim 23, wherein said composition is administered via parenteral administration.

Claim 40. (previously presented): The method of Claim 24, wherein said composition is administered via parenteral administration.

Claim 41. (previously presented): The method of Claim 25, wherein said composition is administered via parenteral administration.

Claim 42. (previously presented): A method for treating a patient in need of treatment for a cardiac disorder, comprising administering to said patient an effective amount of a seven-carbon fatty acid chain composition to provide relief to said patient, wherein said composition is provided in an amount from about 15 to about 40% of the dietary caloric requirement for said patient for 24 hours.

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Claim 43. (previously presented): The method of Claim 42, wherein said composition is administered via enteral administration.

Claim 44. (previously presented): The method of Claim 43, wherein said enteral administration is orally.

Claim 45. (previously presented): The method of Claim 43, wherein enteral administration is via a nasogastric tube.

Claim 46. (previously presented): The method of Claim 42, wherein said composition is administered via parenteral administration.

Claim 47. (previously presented): A method for directly providing fuel to heart tissue of a patient, comprising administering to said patient a seven-carbon fatty acid chain composition whereby said heart tissue rapidly obtains nutrition from odd carbon fatty acid metabolism.

Claim 48. (previously presented): The method of Claim 47, wherein said seven-carbon fatty acid composition comprises n-heptanoic acid.

Claim 49. (previously presented): The method of Claim 47, wherein said seven-carbon fatty acid composition comprises a triglyceride comprising n-heptanoic acid.

Claim 50. (previously presented): The method of Claim 49, wherein said triglyceride comprises triheptanoin.

Claim 51. (previously presented): The method of Claim 47, wherein said seven-carbon fatty acid composition is selected from a substituted, unsaturated, or branched seven-carbon fatty acid composition.

Claim 52. (previously presented): The method of Claim 47, wherein said seven-carbon fatty acid chain composition is selected from the group consisting of 4-methylhexanoate, 4-methylhexenoate, 3-hydroxy-4-methylhexanoate; 5-methylhexanoate, 5-methylhexenoate and 3-hydroxy- 5-methylhexanoate.

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Claim 53. (new): A method for treating a patient in need of treatment for a severe translocase deficiency, comprising the steps of:

providing a patient suffering from one or more symptoms of severe translocase deficiency; and

administering to the patient a therapeutically effective amount of a seven-carbon chain fatty acid composition comprising n-heptanoic acid, triheptanoin, 4-methylhexanoate, 4-methylhexenoate, 3-hydroxy-4-methylhexanoate, 5-methylhexanoate, 5-methylhexenoate and 3-hydroxy-5-methylhexanoate or combination thereof sufficient to overcome the severe translocase deficiency.

Claim 54. (new): The method of Claim 53, wherein the seven-carbon fatty acid composition comprises a triglyceride.

Claim 55. (new): The method of Claim 53, wherein the therapeutically effective amount comprises between about 15 and about 40% of the daily dietary caloric requirement for the patient.

Claim 56. (new): The method of Claim 53, wherein the therapeutically effective amount comprises between about 20 and about 35% of the daily dietary caloric requirement for the patient.

Claim 57. (new): The method of any of Claims 53, wherein the administering is oral, enteral or combination thereof.